

# LXC96 series

## LED Power Supply

### Constant Current LED Power Supplies

LED Power  
96W

#### LED POWER

next generation power  
source

#### FEATURES

- High Efficiency (up to 92%)
- UL1310 Class 2
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP, OTP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXC96 series of Class 2 constant current LED power supplies from Excelsys Technologies can deliver up to 96W of output power in an extremely compact package size.

The LXC96 series of constant current power supplies provides up to 4000mA of output current and 274V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC96 series provides high reliability and high performance in a compact package.

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXC96-0350SW	137-274V	350mA	90-305VAC	310V	92.0%
LXC96-0450SW	106-213V	450mA	90-305VAC	250V	92.0%
LXC96-0700SW	68-137V	700mA	90-305VAC	170V	91.0%
LXC96-1050SW	46-92V	1050mA	90-305VAC	120V	91.0%
LXC96-1400SW	35-69V	1400mA	90-305VAC	100V	90.0%
LXC96-1750SW(C)	27-54.8V	1750mA	90-305VAC	75V	90.0%
LXC96-2100SW(C)	22-45.7V	2100mA	90-305VAC	60V	89.0%
LXC96-2450SW(D)	19-39.1V	2450mA	90-305VAC	55V	89.0%
LXC96-2800SW(D)	17-34.2V	2800mA	90-305VAC	50V	89.0%
LXC96-3150SW(D)	15-30.4V	3150mA	90-305VAC	45V	88.0%
LXC96-3500SW(D)	13-27.4V	3500mA	90-305VAC	40V	88.0%
LXC96-4000SW(E)	12-24V	4000mA	90-305VAC	35V	88.0%

#### Input Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range	Universal Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, 96W output			1.2	A
Leakage Current	277VAC in, 50Hz			1.0	mA
Inrush Current	230VAC in, 25°C, Cold Start			50	A
Power Factor	220VAC, 110VAC	0.96		0.99	

#### Output Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Accuracy	% of Iout			±5	%
Ripple and Noise	20MHz Bandwidth			3.0	% pk-pk
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load		0.6	1	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				
Over Temp Protection	Auto Recovery. Internal component temperature		110		°C

#### General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note A	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models		90.5		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13				
No load Power Dissipation	Measured at 230 VAC		1.0		W
MTBF	MIL-HDBK-217F, 110VAC input, 80% Load, 25°C		400,000		Hours
Lifetime	45°C, 110VAC Input, 80% Load		50,000		Hours
Weight			850		g
Operating Temperature	Maximum Case Temperature Tcase =89°C	-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH



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EMC			
Parameter	Standard	Level	Units
<b>Emissions</b>			
<b>Conducted</b>	EN55015	Compliant	
<b>Radiated</b>	EN55015	Compliant	
<b>Harmonic Distortion</b>	EN61000-3-2	Compliant	
<b>Flicker and Fluctuation</b>	EN61000-3-3	Compliant	
<b>Immunity</b>			
<b>ESD</b>	EN61000-4-2	Level 4	
<b>Radiated RFI</b>	EN61000-4-3	Level 3	
<b>Fast Transients - burst</b>	EN61000-4-4	Level 4	
<b>Surge Immunity</b>	EN61000-4-5	Level 4	
<b>Conducted RFI</b>	EN61000-4-6	Compliant	
<b>Power Freq Magnetic Field</b>	EN61000-4-8	Compliant	
<b>Voltage Dips</b>	EN61000-4-11		

- Note A. Primary to Secondary Isolation test not to be carried on power supply.
- Note B. Load Voltage must be maintained above minimum voltage. See models for voltage range.
- Note C. Class 2 (USR) and Non Class 2( CNR) for dry and damp locations
- Note D. Class 2 (USR and CNR) for dry and damp locations, CSA Class 2 for wet location.
- Note E. Class 2 (USR and CNR) for dry and damp locations and Class 2 (USR and CNR) for wet location.

**INPUT / OUTPUT WIRING**

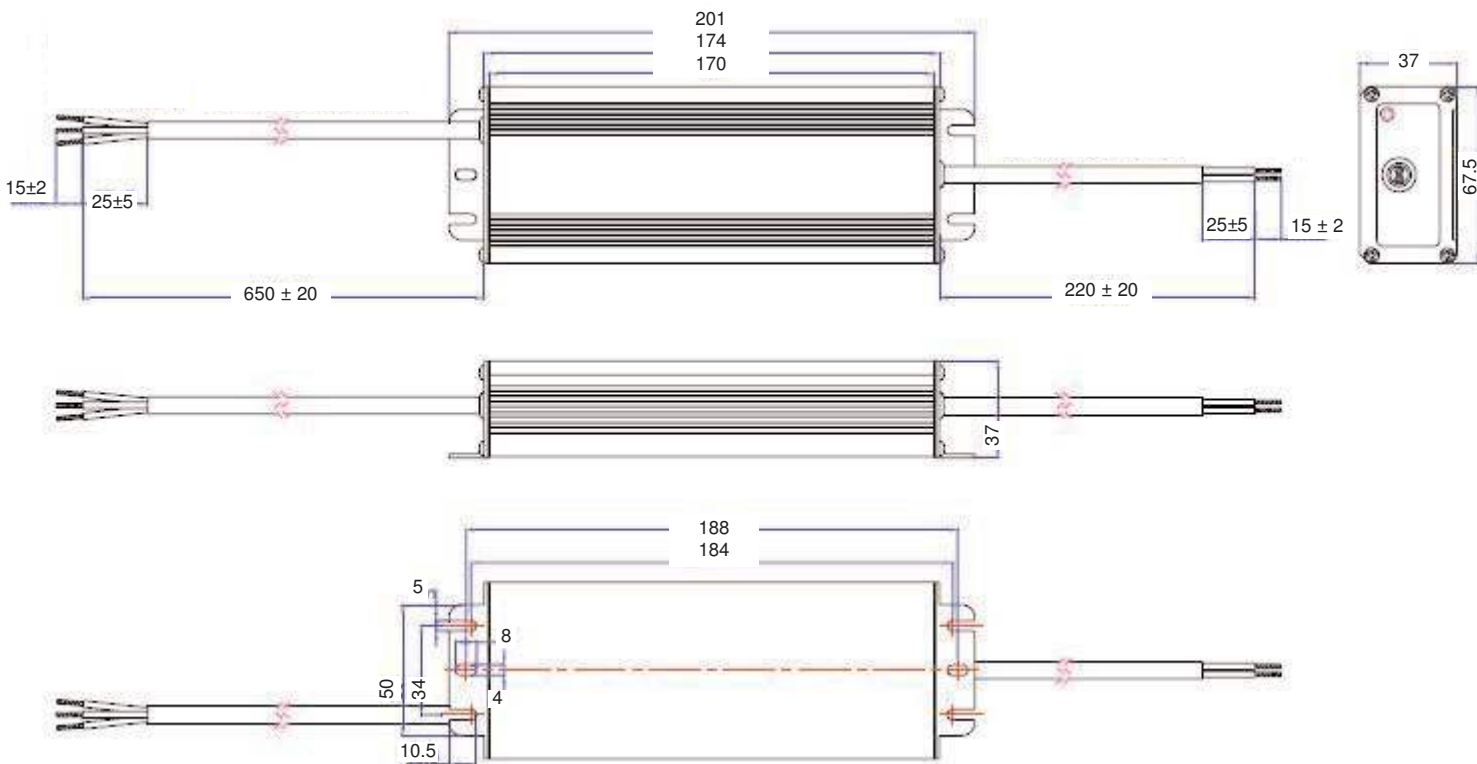
**INPUT CABLE**

SJTW 18AWG 3C  
Black (L), White(N), Green (G) 650±20mm

**OUTPUT CABLE**

SJTW 18AWG 2C  
Black (-V) and Red (+V) 220±20mm

**MECHANICAL SPECIFICATIONS**



Specifications are subject to change without notice  
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